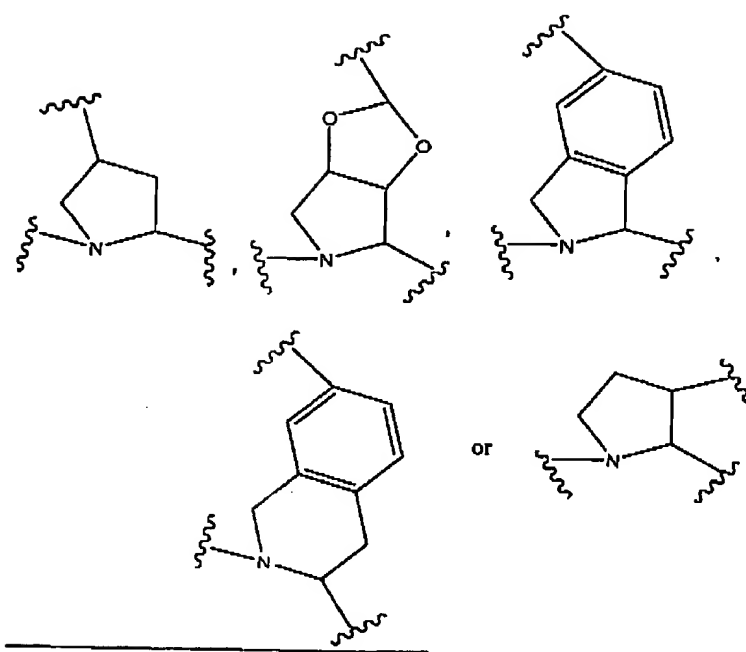




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X and Y are independently selected from the moieties: alkyl, alkyl-aryl, heteroalkyl, heteroaryl, aryl-heteroaryl, ~~alkyl-heteroaryl~~, cycloalkyl, alkyl ether, alkyl-aryl ether, aryl ether, alkyl amino, aryl amino, alkyl-aryl amino, alkyl sulfide, alkyl-aryl sulfide, aryl sulfide, ~~alkyl sulfone~~, ~~alkyl-aryl sulfone~~, ~~aryl sulfone~~, ~~alkyl-aryl sulfoxide~~, ~~alkyl-aryl sulfoxide~~, alkyl amide, alkyl-aryl amide, aryl amide, alkyl sulfonamide, alkyl-aryl sulfonamide, aryl sulfonamide, ~~alkyl urea~~, ~~alkyl-aryl urea~~, ~~aryl urea~~, ~~alkyl carbamate~~, ~~alkyl-aryl carbamate~~, ~~aryl carbamate~~, ~~alkyl hydrazide~~, ~~alkyl-aryl hydrazide~~, ~~alkyl hydroxamide~~, ~~alkyl-aryl hydroxamide~~, alkyl sulfonyl, aryl sulfonyl, heteroalkyl sulfonyl, heteroaryl sulfonyl, alkyl carbonyl, aryl carbonyl, heteroalkyl carbonyl, heteroaryl carbonyl, alkoxycarbonyl, aryloxy carbonyl, heteroaryloxy carbonyl, ~~alkyl aminocarbonyl~~, ~~aryl aminocarbonyl~~, ~~heteroaryl aminocarbonyl~~ or a combination thereof, with the proviso that X and Y may optionally be additionally substituted with moieties selected from the group consisting of aromatic, alkyl, alkyl-aryl, heteroalkyl, ~~aryl-heteroaryl~~, ~~alkyl-heteroaryl~~, and cycloalkyl, ~~alkyl ether~~, ~~alkyl-aryl ether~~, ~~alkyl sulfide~~, ~~alkyl-aryl sulfide~~, ~~alkyl sulfone~~, ~~alkyl-aryl sulfone~~, ~~alkyl amide~~, ~~alkyl-aryl amide~~, ~~alkyl sulfonamide~~,

~~alkyl amines, alkyl-aryl amines, alkyl-aryl-sulfonamide, alkyl-urea, alkyl-aryl urea, alkyl-carbamate and alkyl-aryl-carbamate;~~

$R^1 = \text{COR}^5$  or  $\text{B}(\text{OR})_2$ , wherein  $R^5 = \text{H}, \text{OH}, \text{OR}^8, \text{NR}^9\text{R}^{10}, \text{CF}_3, \text{C}_2\text{F}_5, \text{C}_3\text{F}_7, \text{CF}_2\text{R}^6, \text{R}^6$ , or  $\text{COR}^7$  wherein  $R^7 = \text{H}, \text{OH}, \text{OR}^8, \text{CHR}^9\text{R}^{10}$ , or  $\text{NR}^9\text{R}^{10}$ , wherein  $R^6, R^8, R^9$  and  $R^{10}$  are independently selected from the group consisting of H, alkyl, aryl, heteroalkyl, heteroaryl, cycloalkyl, cycloalkyl, arylalkyl, heteroarylalkyl,  $\text{CH}(\text{R}^1)\text{COOR}^{11}$ ,  $\text{CH}(\text{R}^1)\text{CONR}^{12}\text{R}^{13}$ ,  $\text{CH}(\text{R}^1)\text{CONHCH}(\text{R}^2)\text{COO R}^{11}$ ,  $\text{CH}(\text{R}^1)\text{CONHCH}(\text{R}^2)\text{CONR}^{12}\text{R}^{13}$ ,  $\text{CH}(\text{R}^1)\text{CONHCH}(\text{R}^2)\text{R}'$ ,  $\text{CH}(\text{R}^1)\text{CONHCH}(\text{R}^2)\text{CONHCH}(\text{R}^3)\text{COO R}^{11}$ ,  $\text{CH}(\text{R}^1)\text{CONHCH}(\text{R}^2)\text{CONHCH}(\text{R}^3)\text{CONR}^{12}\text{R}^{13}$ ,  $\text{CH}(\text{R}^1)\text{CONHCH}(\text{R}^2)\text{CONHCH}(\text{R}^3)\text{CONHCH}(\text{R}^4)\text{COO R}^{11}$ ,  $\text{CH}(\text{R}^1)\text{CONHCH}(\text{R}^2)\text{CONHCH}(\text{R}^3)\text{CONHCH}(\text{R}^4)\text{CONR}^{12}\text{R}^{13}$ ,  $\text{CH}(\text{R}^1)\text{CONHCH}(\text{R}^2)\text{CONHCH}(\text{R}^3)\text{CONHCH}(\text{R}^4)\text{CONHCH}(\text{R}^5)\text{COO R}^{11}$ ,  $\text{CH}(\text{R}^1)\text{CONHCH}(\text{R}^2)\text{CONHCH}(\text{R}^3)\text{CONHCH}(\text{R}^4)\text{CONHCH}(\text{R}^5)\text{CONR}^{12}\text{R}^{13}$ , wherein  $\text{R}^1, \text{R}^2, \text{R}^3, \text{R}^4, \text{R}^5, \text{R}^{11}, \text{R}^{12}, \text{R}^{13}$ , and  $\text{R}'$  are independently selected from a group consisting of H, alkyl, aryl, heteroalkyl, heteroaryl, cycloalkyl, alkyl-aryl, alkyl-heteroaryl, aryl-alkyl and heteroarylalkyl;

Z is selected from O, N, or CH;

W may be present or absent, and if W is present, W is selected from  $\text{C}=\text{O}$ ,  $\text{C}=\text{S}$ , or  $\text{SO}_2$ ;

~~Q may be present or absent, and when Q is present, Q is CH, N, P,  $(\text{CH}_2)_p$ ,  $(\text{CHR})_p$ ,  $(\text{CRR}')_p$ , O, NR, S, or  $\text{SO}_2$ ; and when Q is absent, M is also absent, and A is directly linked to X;~~

~~A is O,  $\text{CH}_2$ ,  $(\text{CHR})_p$ ,  $(\text{CHR-CHR}')_p$ ,  $(\text{CRR}')_p$ , NR, S,  $\text{SO}_2$  or a bond;~~

~~E is CH, N or CR, or a double bond towards A, L or G;~~

~~G may be present or absent, and when G is present, G is  $(\text{CH}_2)_p$ ,~~

~~$(\text{CHR})_p$ , or  $(\text{CRR}')_p$ ; and when G is absent, J is present and E is directly connected to the carbon atom where G was connected to;~~

~~J may be absent or present, and when J is present, J is  $(\text{CH}_2)_p$ ,  $(\text{CHR})_p$ ,  $(\text{CRR}')_p$ ,  $\text{SO}_2$ , NH, NR or O; and when J is absent, G is present and E is directly linked to N;~~

~~L may be present or absent, and when L is present, L is CH, CR, O, S or NR; and when L is absent, then M may be absent or present, and if M is present with L being absent, then M is directly and independently linked to E, and J is directly and independently linked to E;~~

~~M may be present or absent, and when M is present, M is O, NR, S, SO<sub>2</sub>, (CH<sub>2</sub>)<sub>p</sub>, (CHR)<sub>p</sub>, (CHR-CHR')<sub>p</sub>, or (CRR')<sub>p</sub>;~~

~~p is a number from 0 to 6; and~~

~~R<sup>4</sup> is H, C1-C10 alkyl, C1-C10 alkenyl or C3-C8 cycloalkyl; and~~

~~R, R', R<sup>2</sup>, and R<sup>3</sup> and R<sup>4</sup> are independently selected from the group consisting of H; C1-C10 alkyl; C2-C10 alkenyl; C3-C8 cycloalkyl; C3-C8 heterocycloalkyl, alkoxy, aryloxy, alkylthio, arylthio, amino, amido, ester, carboxylic acid, carbamate, urea, ketone, aldehyde, cyano, nitro; oxygen, nitrogen, sulfur, or phosphorus atoms with said oxygen, nitrogen, sulfur, or phosphorus atoms numbering zero to six; (cycloalkyl)alkyl and (heterocycloalkyl)alkyl, wherein said cycloalkyl is made of three to eight carbon atoms, and zero to six oxygen, nitrogen, sulfur, or phosphorus atoms, and said alkyl is of one to six carbon atoms; aryl; heteroaryl; alkyl-aryl; and alkyl-heteroaryl; with said alkyl, heteroalkyl, alkenyl, heteroalkenyl, aryl, heteroaryl, cycloalkyl and heterocycloalkyl moieties may be optionally substituted, with said term "substituted" referring to optional and suitable substitution with one or more moieties selected from the group consisting of alkyl, alkenyl, alkynyl, aryl, aralkyl, cycloalkyl, heterocyclic, halogen, hydroxy, thio, alkoxy, aryloxy, alkylthio, arylthio, amino, amido, ester, carboxylic acid, carbamate, urea, ketone, aldehyde, cyano, nitro, sulfonamide, sulfoxide, sulfone, sulfonyl urea, hydrazide, and hydroxamate.~~

Claim 2 (previously amended): The compound of claim 1, wherein R<sup>1</sup> = COR<sup>5</sup>, and R<sup>5</sup> is H, OH, COOR<sup>8</sup>, or CONR<sup>9</sup>R<sup>10</sup>.

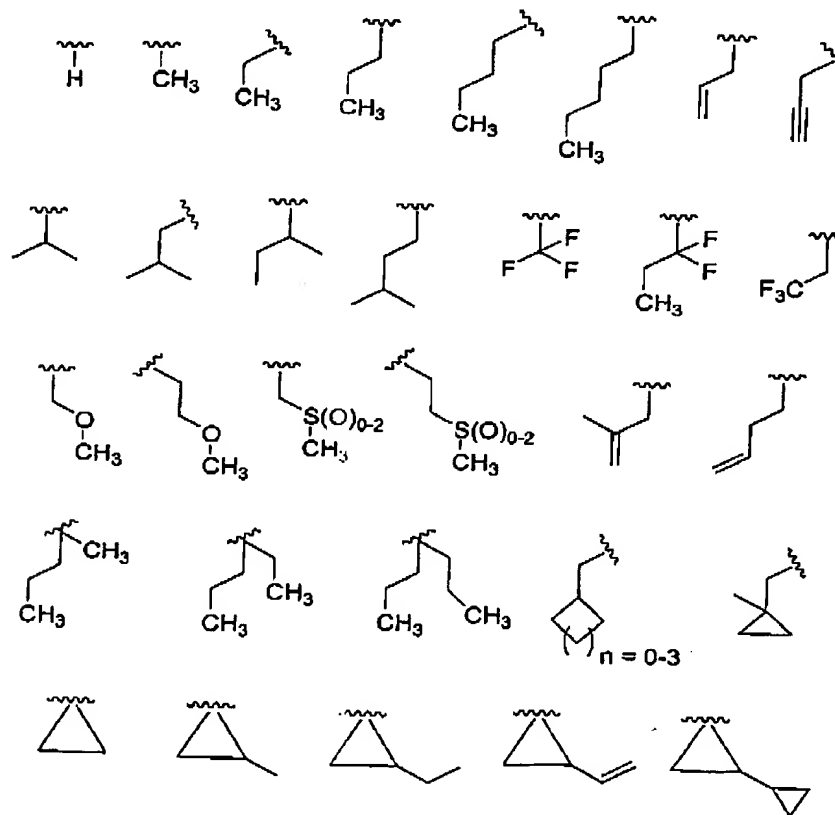
Claim 3 (previously amended): The compound of claim 2, wherein R<sup>1</sup> = COCONR<sup>9</sup>R<sup>10</sup>, and R<sup>9</sup> is H, R<sup>10</sup> is H, CH(R<sup>1'</sup>)COOR<sup>11</sup>, CH(R<sup>1'</sup>)CONR<sup>12</sup>R<sup>13</sup>, CH(R<sup>1'</sup>)CONHCH(R<sup>2'</sup>)COOR<sup>11</sup>, CH(R<sup>1'</sup>)CONHCH(R<sup>2'</sup>)CONR<sup>12</sup>R<sup>13</sup>, or CH(R<sup>1'</sup>)CONHCH(R<sup>2'</sup>)(R').

Claim 4 (previously amended): The compound of claim 3, wherein  $R^{10} = \text{CH}(R^1)\text{CONHCH}(R^2)\text{COOR}^{11}$ ,  $\text{CH}(R^1)\text{CONHCH}(R^2)\text{CONR}^{12}\text{R}^{13}$ , or  $\text{CH}(R^1)\text{CONHCH}(R^2)(R')$ , wherein  $R^1$  is H or alkyl, and  $R^2$  is phenyl, substituted phenyl, hetero atom-substituted phenyl, thiophenyl, cyclohexyl, cyclopentyl, cyclopropyl, piperidyl, pyridyl and 2-indanyl.

Claim 5 (original): The compound of claim 4, wherein  $R^1$  is H.

Claim 6 (previously amended): The compound of claim 5, wherein  $R^2 =$  phenyl, thiophenyl, cyclohexyl, 2-indanyl, cyclopentyl, pyridyl, or phenyl(4-HNSO<sub>2</sub>NH<sub>2</sub>),  $R^{11}$  is H or *tert*-butyl,  $R^{12}$  and  $R^{13}$  are methyl, and  $R'$  is hydroxymethyl or *tert*-butoxymethyl.

Claim 7 (original): The compound of claim 1, wherein  $R^2$  is selected from the group consisting of the following moieties:

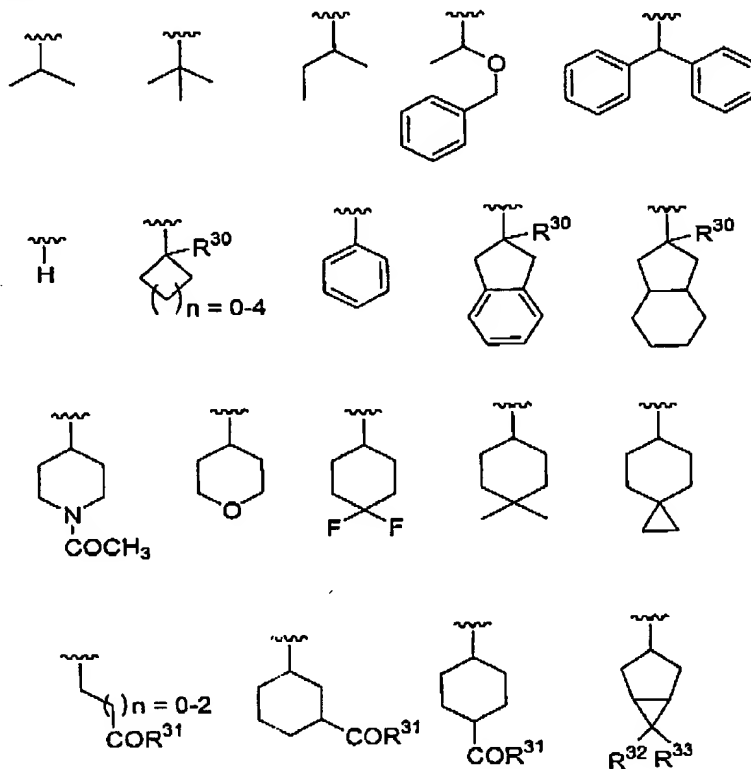


7

Claim 8 (previously amended): The compound of claim 7 wherein  $R^1 = \text{COR}^5$ , and  $R^5$  is H, OH,  $\text{COOR}^8$ , or  $\text{CONR}^9\text{R}^{10}$ .

Claims 9-17: Cancelled without prejudice.

Claim 18 (original): The compound of claim 1, wherein  $R^3$  is selected from the group consisting of:



wherein  $R^{30} = \text{H}$ ,  $\text{CH}_3$  or other alkyl groups;

$R^{31} = \text{OH}$ , O-alkyl,  $\text{NH}_2$ , N-alkyl; and

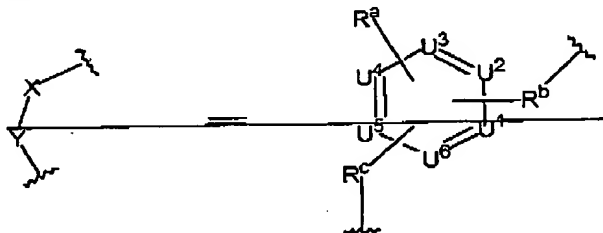
$R^{32}$  and  $R^{33}$  may be the same or different and are selected independently from H, F, Cl, Br and  $\text{CH}_3$ .

Claim 19: Cancelled without prejudice.

Claim 20 (original): A compound of claim 19, wherein  $Z = \text{N}$  and  $R^4 = \text{H}$ .

Claims 21-22: Cancelled without prejudice.

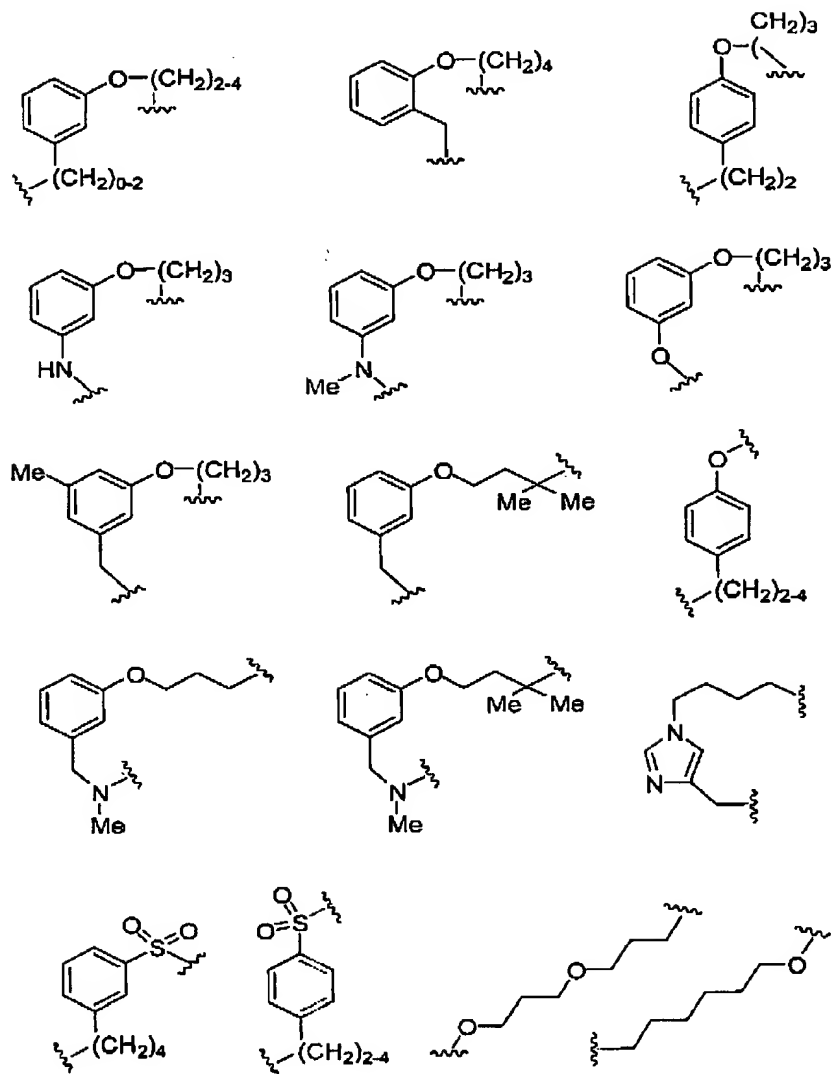
Claim 23 (currently amended): A compound of claim 20 24, wherein:  
X and Y are independently alkyl, alkyl-aryl, heteroalkyl, heteroaryl, alkyl ether  
or alkyl aryl ether.



wherein ~~R<sup>b</sup> is connected directly to Q if Q is present or to A if Q is absent; R<sup>c</sup>~~  
~~is connected to W; U<sup>1</sup> through U<sup>6</sup> can be part of a six membered carbon ring,~~  
~~or five or six membered ring with one or more heteroatoms;~~  
~~R<sup>a</sup> = H, alkyl, alkoxy, hydroxy, thio, halogen, nitro, cyano, carboxylic acid,~~  
~~ester, amide, amino, nitrile, or CF<sub>3</sub>;~~  
~~R<sup>b</sup> is a bond, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, O, S, SO<sub>2</sub>, NH,~~  
~~O(alkyl), S(alkyl), SO<sub>2</sub>(alkyl) or N(alkyl); and~~  
~~R<sup>c</sup> is a bond, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, O, S, SO<sub>2</sub>, NH,~~  
~~O(alkyl), S(alkyl), SO<sub>2</sub>(alkyl), N(alkyl) or CH<sub>2</sub>-N(alkyl) with the CH<sub>2</sub> being~~  
~~linked to the aromatic ring.~~

Claim 24 (currently amended): A compound of claim 20 24, wherein the  
 moiety X-Y is selected from the group consisting of the following structures:

9



Claim 25 (original): A pharmaceutical composition comprising as an active ingredient a compound of claim 1.

Claim 26 (previously cancelled).

Claim 27 (original): The pharmaceutical composition of claim 25 additionally comprising a pharmaceutically acceptable carrier.



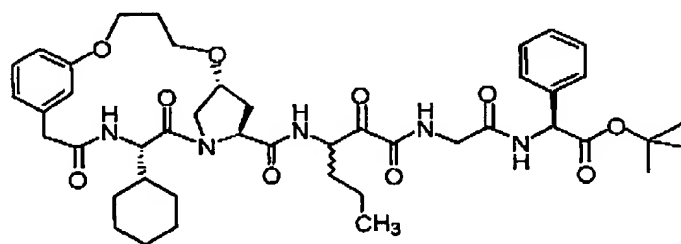
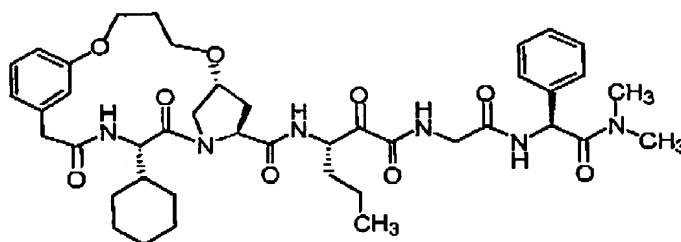
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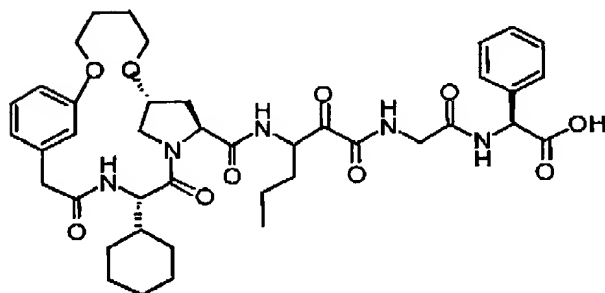
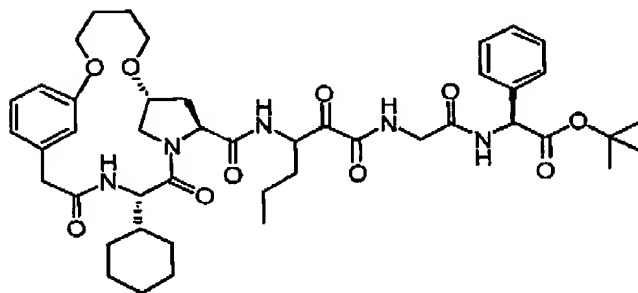
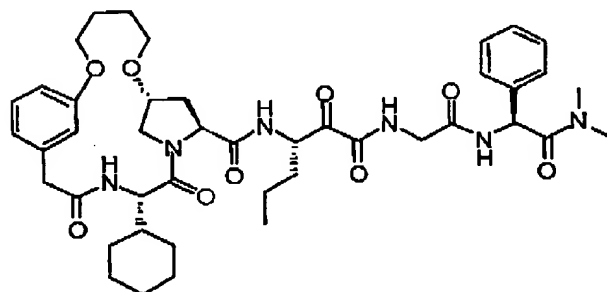
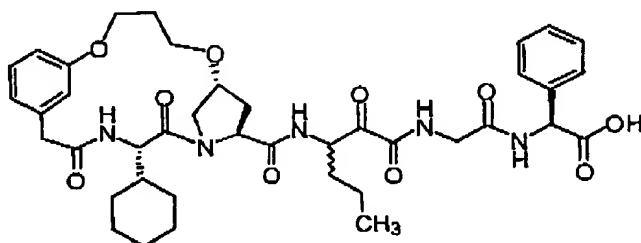
Claim 28 (previously amended): A method of treating disorders associated with the Hepatitis C Virus ("HCV") protease, said method comprising administering to a patient in need of such treatment a pharmaceutical composition which comprises therapeutically effective amounts of a compound of claim 1.

Claim 29 (previously cancelled).

Claim 30 (previously amended): A method of preparing a pharmaceutical composition for treating the disorders associated with the Hepatitis C Virus ("HCV") protease, said method comprising bringing into intimate contact a compound of claim 1 and a pharmaceutically acceptable carrier.

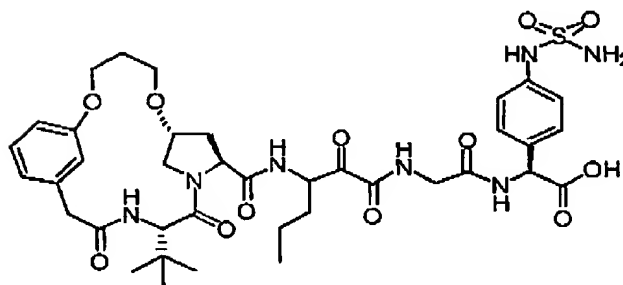
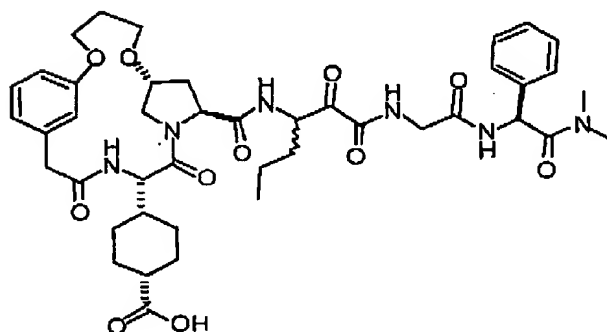
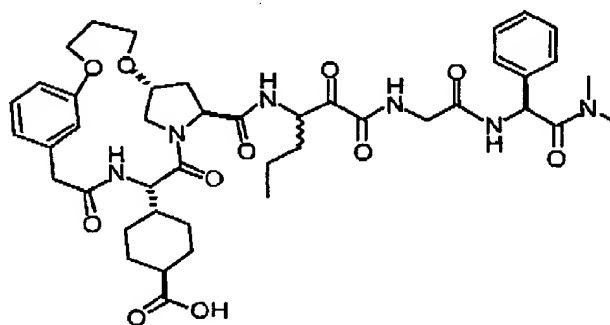
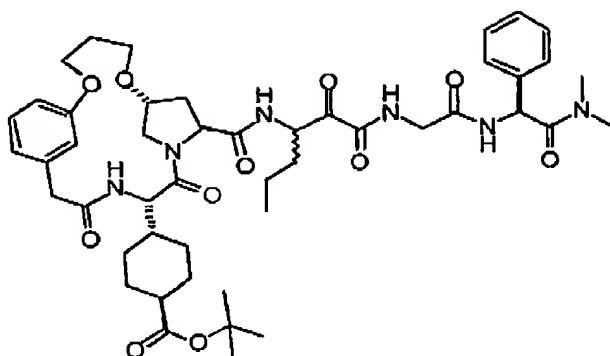
Claim 31 (previously amended): A compound exhibiting Hepatitis C Virus ("HCV") protease inhibitory activity, including enantiomers, stereoisomers and tautomers of said compound, and pharmaceutically acceptable salts or solvates of said compound, said compound being selected from the compounds of structures listed below:



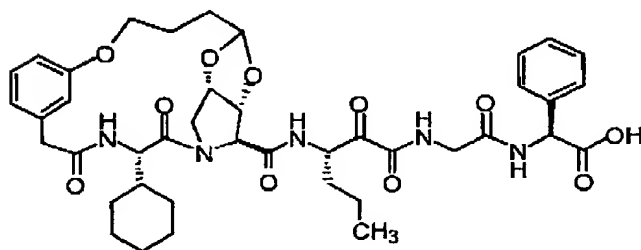
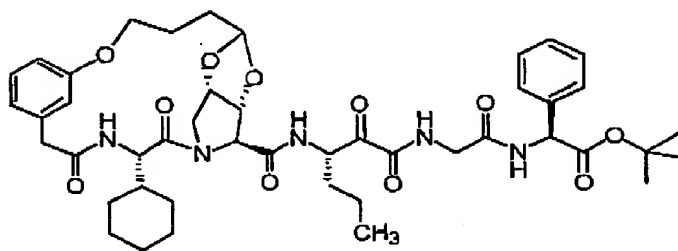
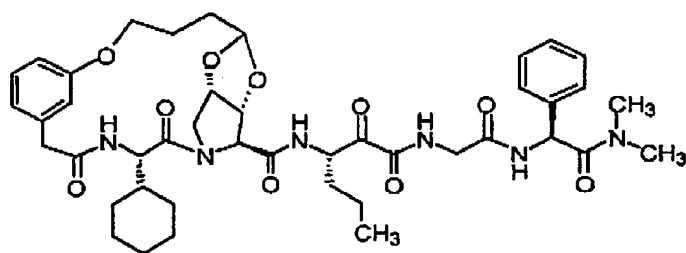
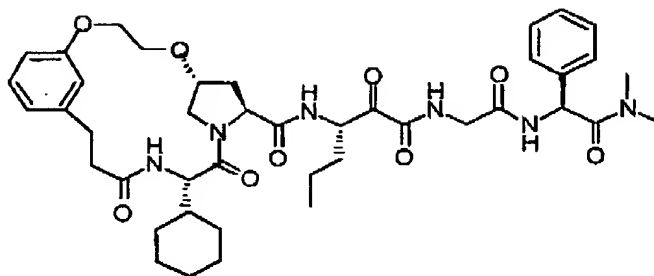




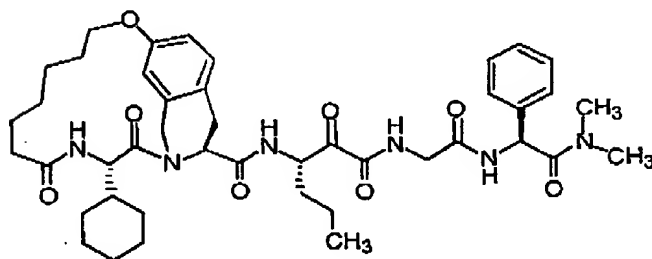
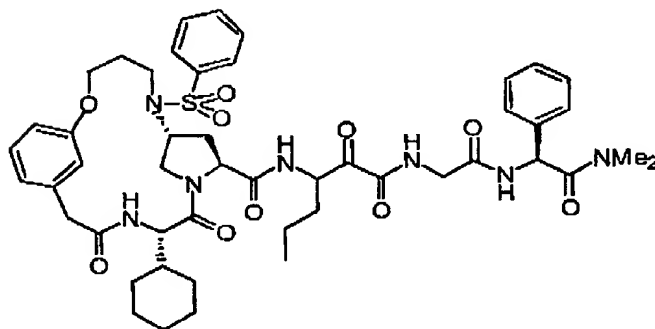
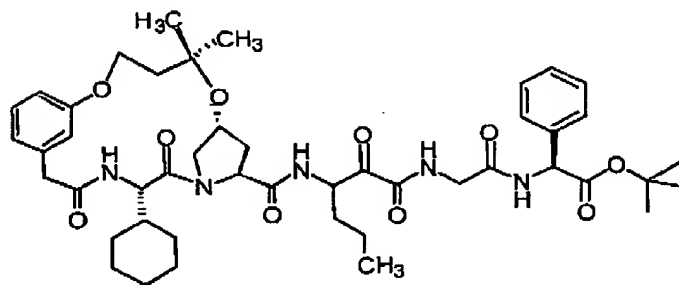
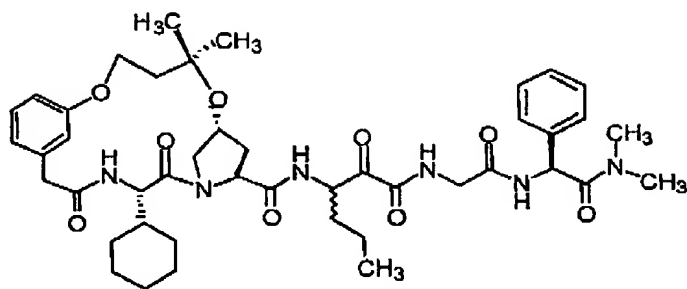
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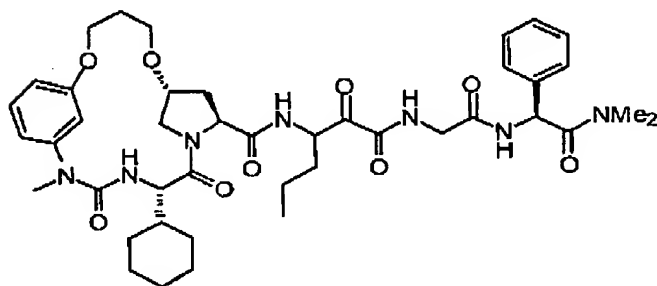
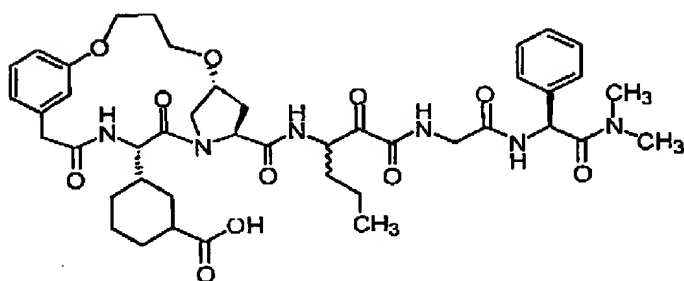
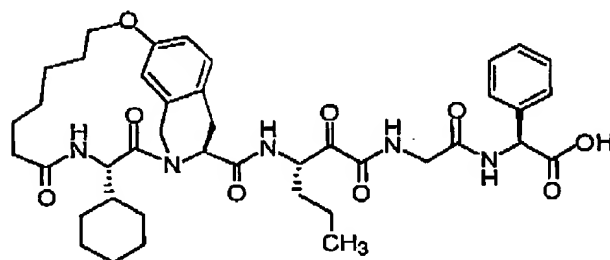
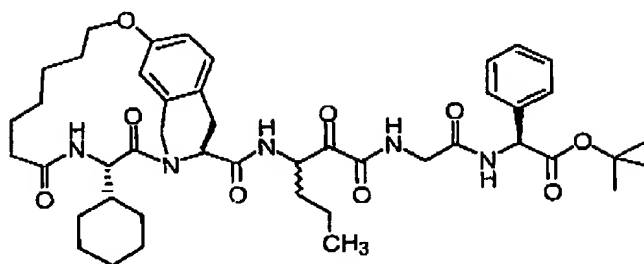
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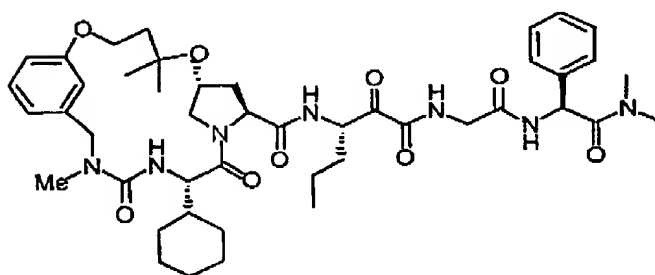
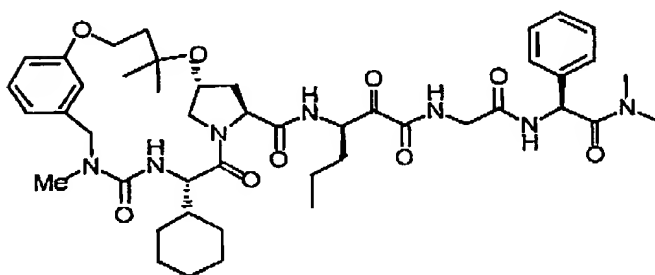
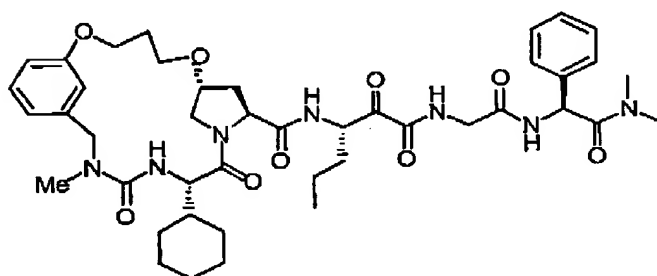
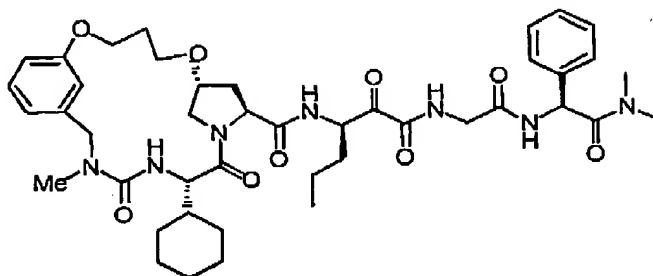
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16

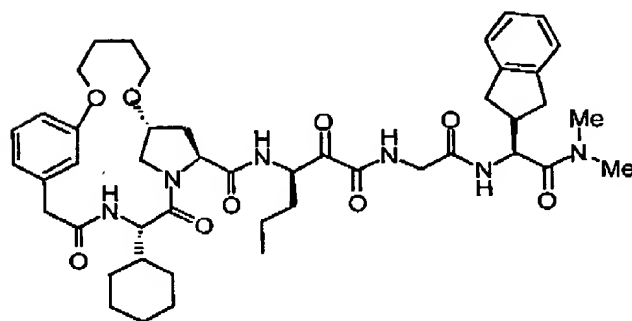
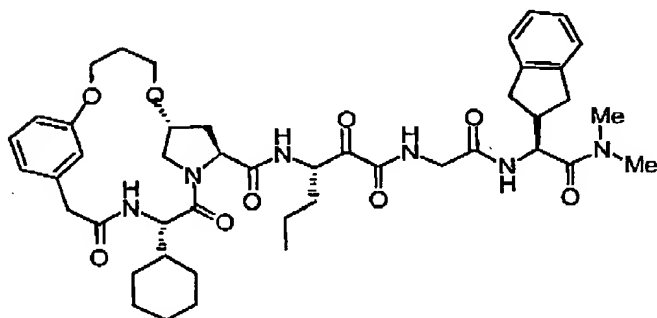
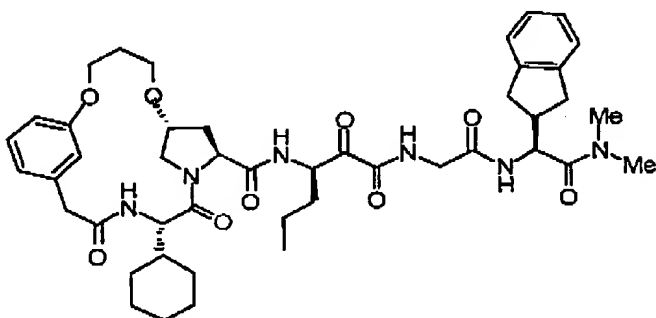
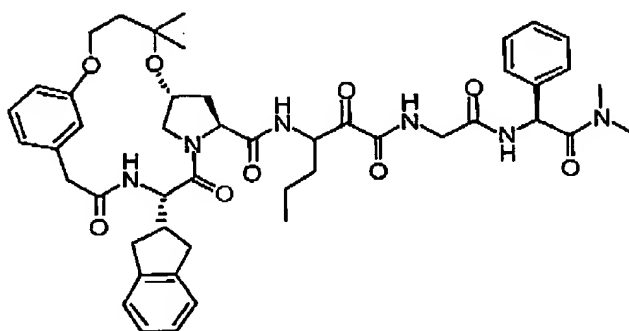


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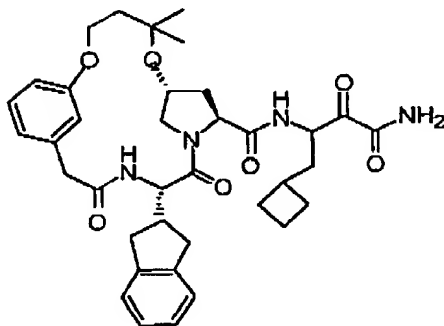
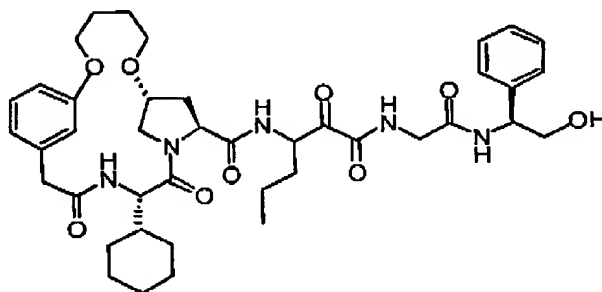
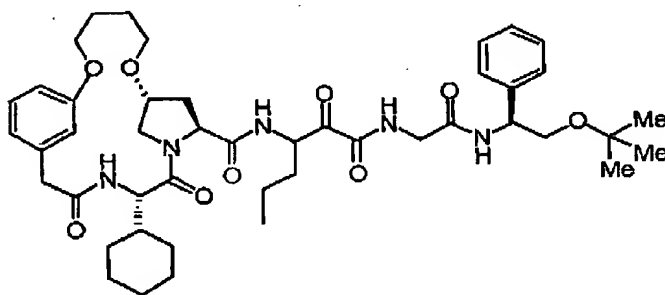
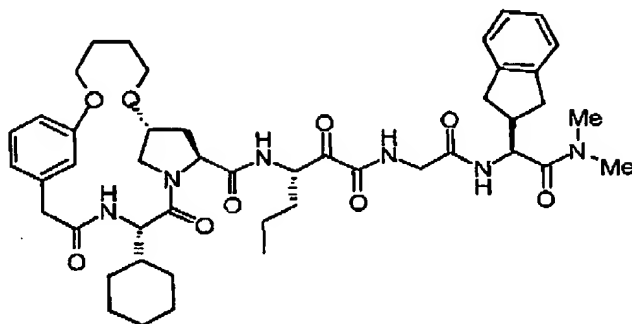




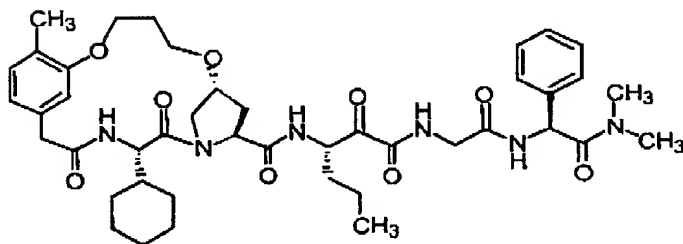
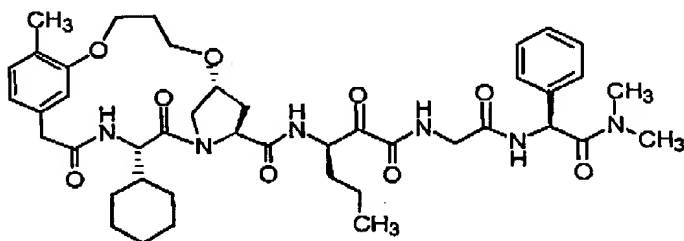
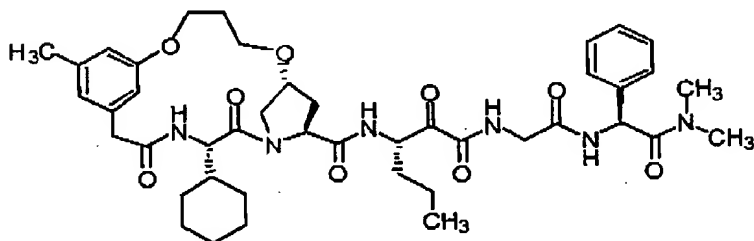
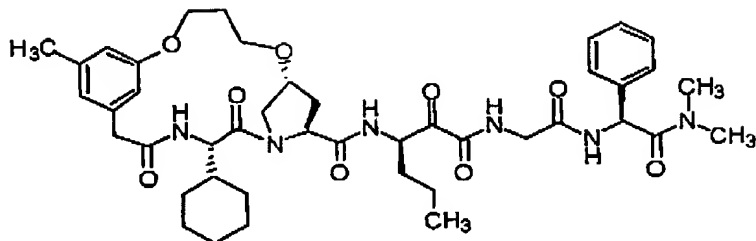
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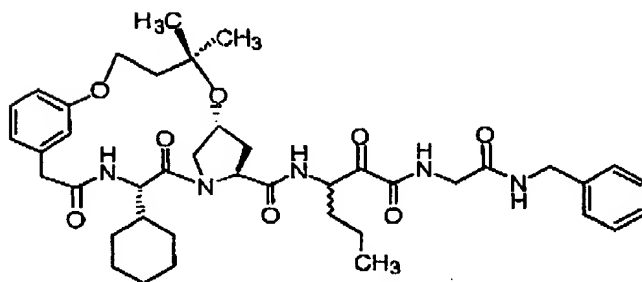
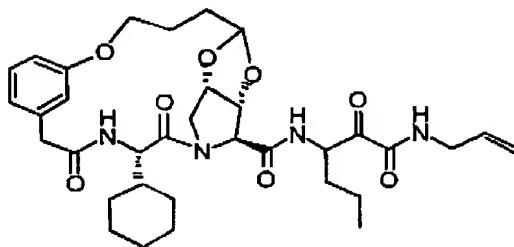
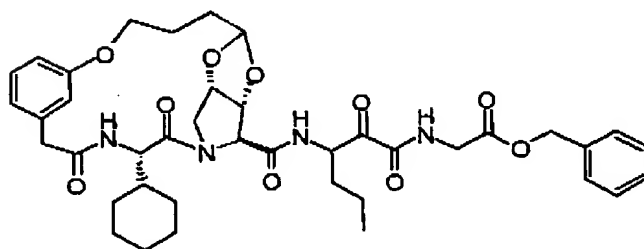
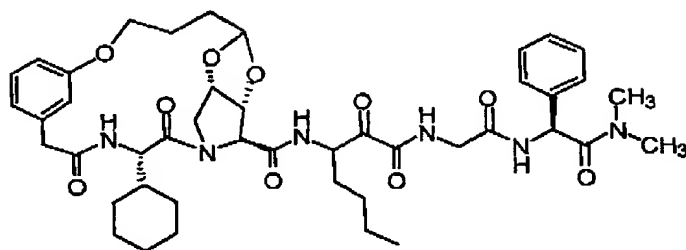
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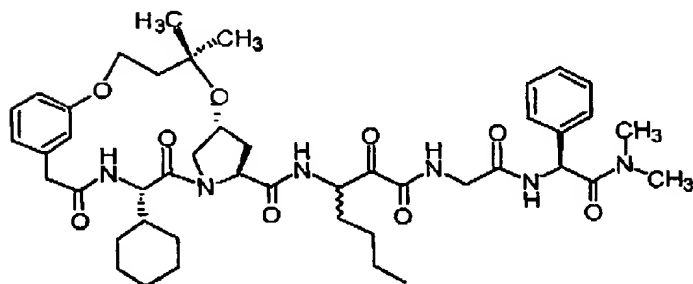
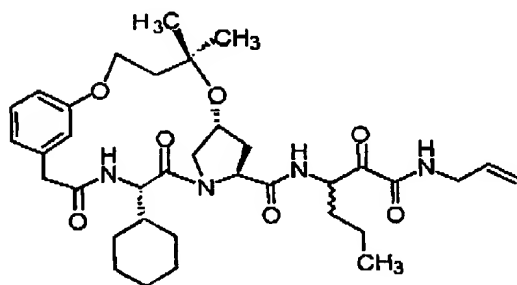
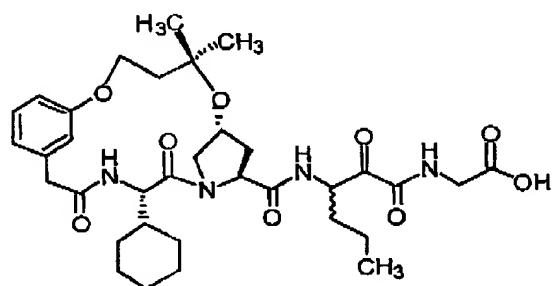
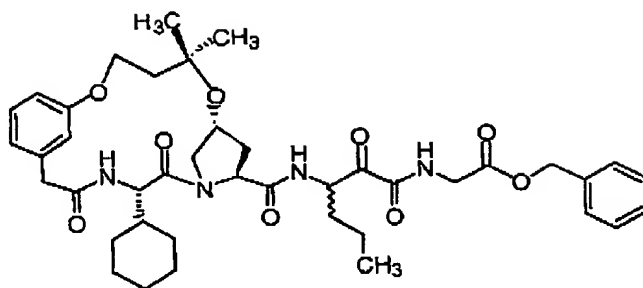
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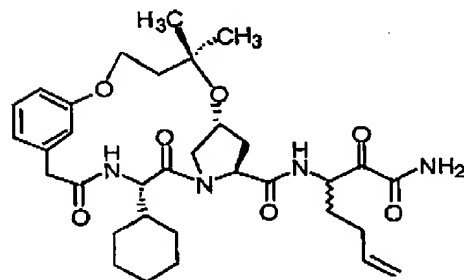
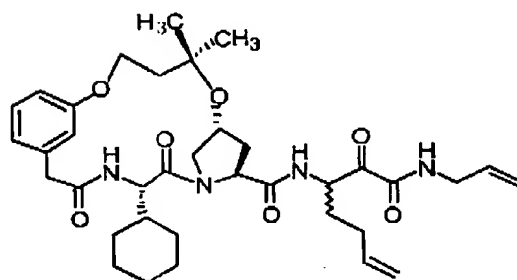
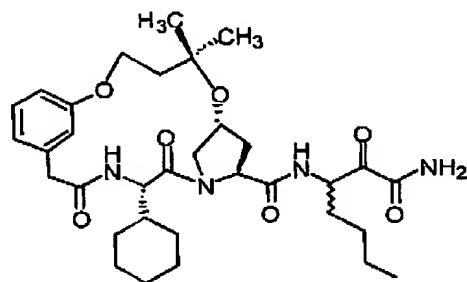
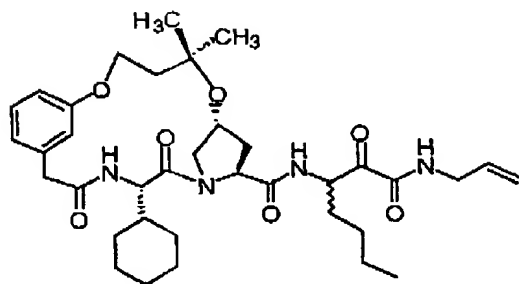
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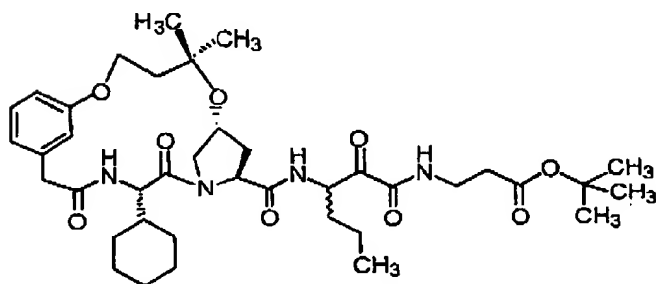
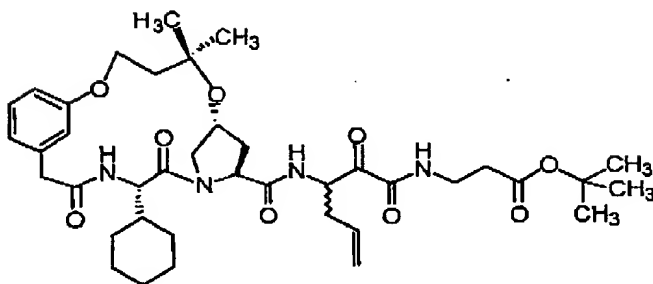
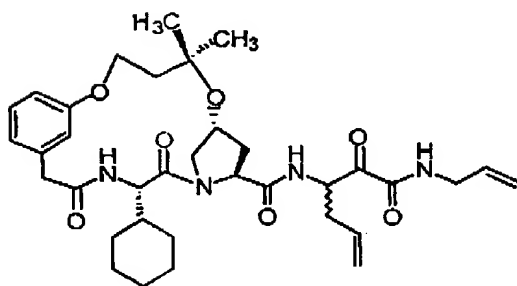
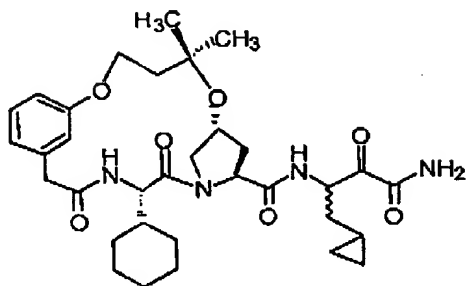
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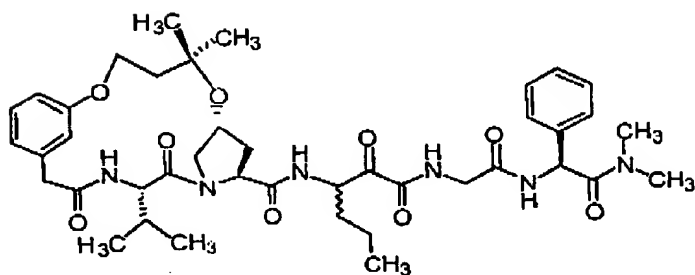
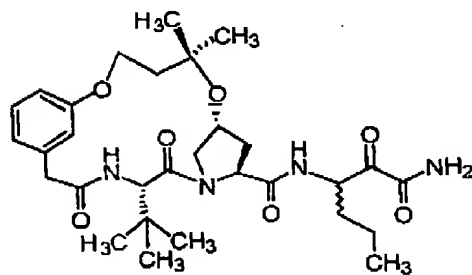
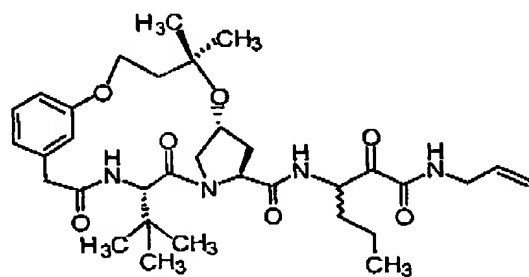
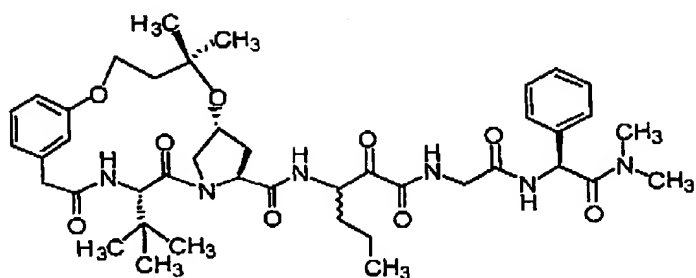
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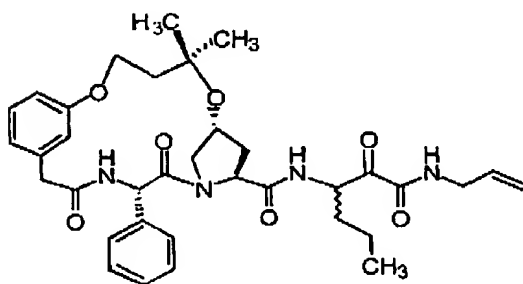
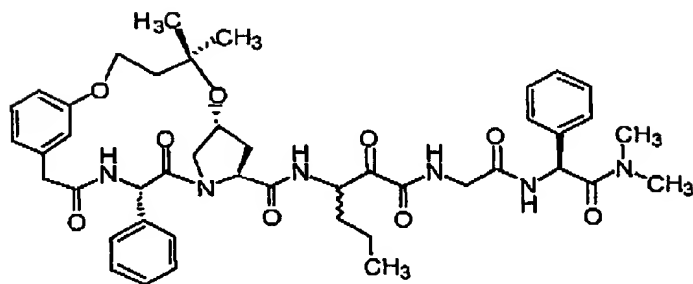
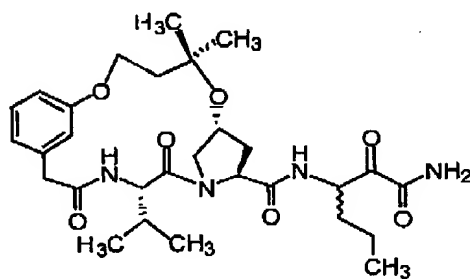
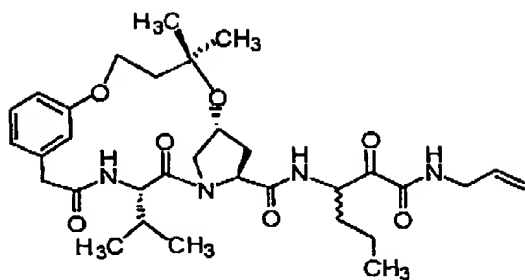


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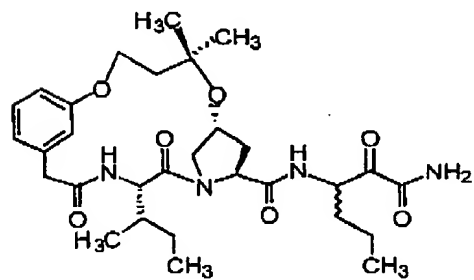
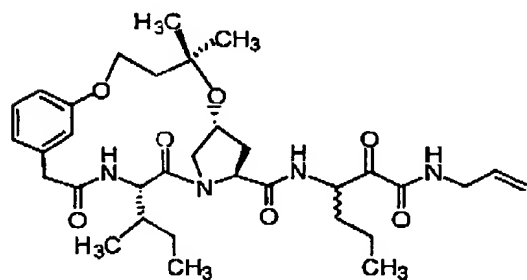
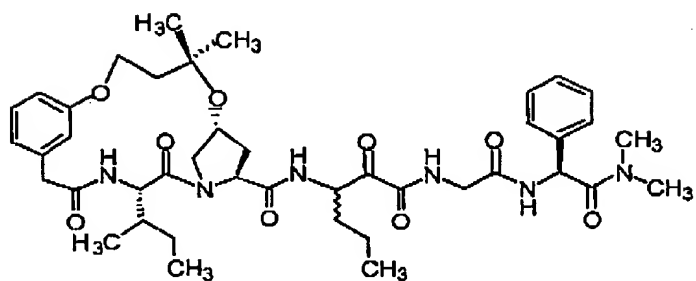
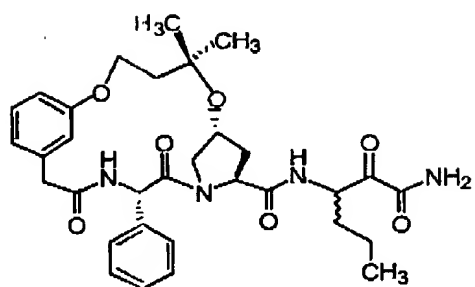




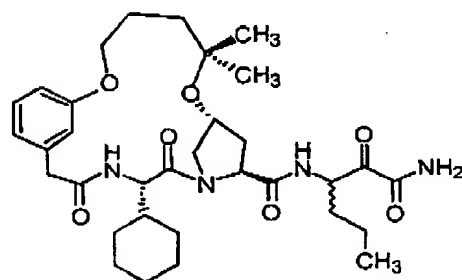
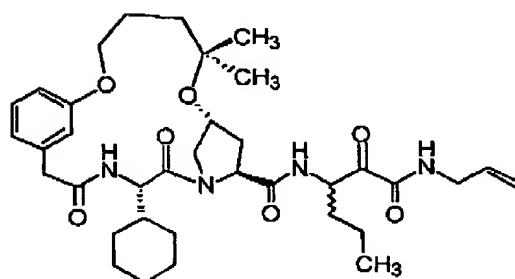
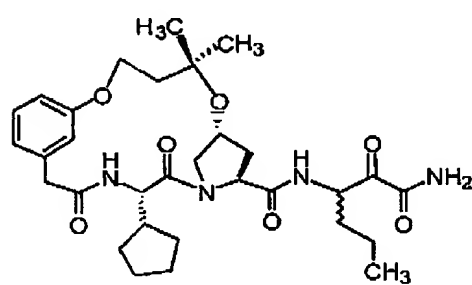
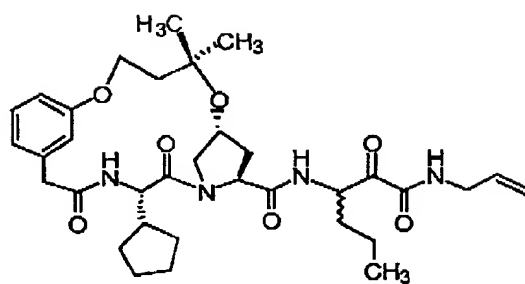
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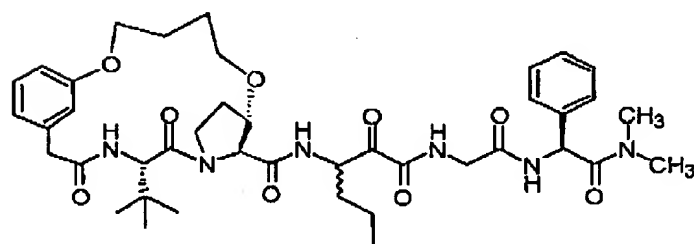
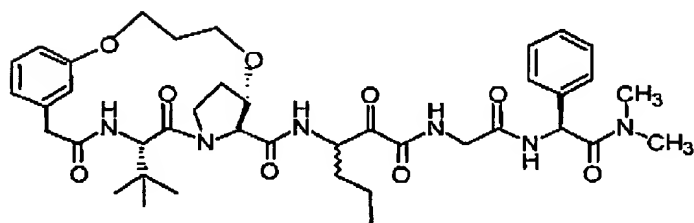
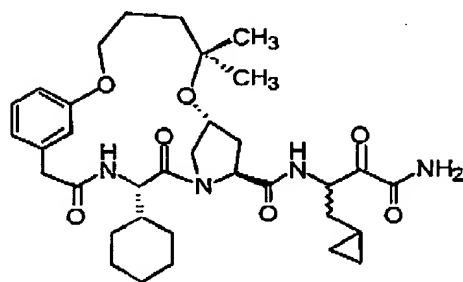
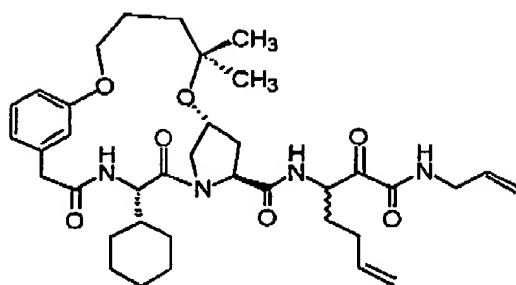
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Claim 32 (previously amended): A pharmaceutical composition for treating disorders associated with the Hepatitis C Virus ("HCV") protease, said composition comprising therapeutically effective amount of one or more compounds in claim 31 and a pharmaceutically acceptable carrier.

Claim 33 (original): The pharmaceutical composition of claim 32, additionally containing an antiviral agent.

Claim 34 (previously amended): The pharmaceutical composition of claim 32 or claim 33, additionally containing an interferon.

Claim 35 (original): The pharmaceutical composition of claim 34, wherein said antiviral agent is ribavirin and said interferon is  $\alpha$ -interferon.

Claim 36: Cancelled without prejudice.